

GAMING APPARATUS

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application is based upon and claims the benefit of priority from the prior Japanese Patent Applications No. P2002-185047, filed on Jun. 25, 2002; the entire contents of which are incorporated herein by reference.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The present invention relates to a gaming apparatus, such as slot machine, pachinko machine or other gaming apparatus, which comprise a variable display means to variably display symbols required for a game and a controller to control the varying of the display.

[0004] 2. Description of the Related Art

[0005] Conventionally, as an aforementioned type of gaming apparatus, a slot machine which comprises a stopping means to stop varying of the display, as so-called "pachi-slo" gaming apparatus is known. FIG. 1 shows a conventional pachi-slo gaming apparatus X.

[0006] The pachi-slo gaming apparatus X comprises, three reels **104** to **106**, which variably display a plurality of symbols, in display windows **101** to **103** on a face panel **100**, and a variable display unit configured with reel stop buttons **107** to **109**, to stop the reels **104** to **106**. If a prescribed symbol combination lines up on the variable display unit, a return is given to a player of the pachi-slo gaming apparatus X.

[0007] Further, winning lines, which relate to nine (9) symbols formed by three (3) rows X three (3) lines are printed on a front side of the face panel **100**. These winning lines are a one medal winning line **111** in the middle, which becomes active if one medal is inserted, two medal winning lines **112a**, **112b**, which become additionally active if two medals are inserted, and three medal winning lines **113a**, **113b**, which become additionally active if three medals are inserted. In FIG. 1, the pachi-slo gaming apparatus X also has a game token insertion slot **114** configured to accept a game token (e.g., medal or coin) and a start lever **115** configured to start a game.

[0008] Incidentally, regarding the variable display unit, besides the above mechanical type using the reels **104** to **106**, there is also a display unit which can variably display symbols using a liquid crystal display (LCD), etc.

[0009] As for procedure of playing game, a game is started by insertion of a game token into the game token insertion slot **114**. The controller then controls the variable display unit to spin the reels **104** to **106** according to an operation of the start lever **115** by the player, and symbols are then variably displayed.

[0010] The variably displayed symbols stop automatically after a certain period of time or stop according to an operation of the reel stop buttons **107** to **109** so as to stop spinning of the reels **104** to **106** one after the other. As a result, if symbols on the reels **104** to **106** appeared within the display windows **101** to **103** reach a certain combination

(winning combination), game tokens are paid out so that a return can be given to the player.

[0011] The aforementioned pachi-slo gaming apparatus X has a plurality of winning modes. Specifically, in a case where the player wins a prescribed prize, in addition to a single payout of medals, a game state is transferred to an advantageous state for the player for a certain period of time rather than the normal game state. As for such prizes, there are a big bonus (hereinafter referred to as "BB"), which allows a certain number of games serving relatively a bigger return to the player, and a regular bonus (hereinafter referred to as "RB"), which allows a certain number of games serving relatively a smaller return to the player.

[0012] Further, in the pachi-slo gaming apparatus X, a combination of symbols that lines up along the active winning lines **111** to **113** (hereinafter referred to as "active line") is internally sampled (hereinafter referred to as "internal sampling"), and winning is determined based on the result of internal sampling and a timing when the player performs a stopping operation by pushing of the reel stop buttons **107** to **109**.

[0013] In other words, in order to win a prize which medals or coins are paid out, it is necessary that winning as a result of internal sampling (hereinafter referred to as "internally winning"), and that the player performs the stopping operation at a timing that allows lining up of the combination corresponding to the prize acquired by internally winning (hereinafter referred to as "internally winning prize") along the active line(s).

[0014] It means that even if the internally winning is achieved, the prize is not awarded in a case where the timing of the stopping operation is not appropriate. Therefore, a technique of performing the stopping operation in a timely manner (which is called "see-and-push" and which intervention of player's technique is high) is required, and such a type of pachi-slo gaming apparatus has become major today.

[0015] Regarding such a type of pachi-slo gaming apparatus, various techniques have been recently proposed to display the symbols as well as the winning lines **111** to **113** on the face panel **100** in order to improve attractiveness and to ease identification of the winning prizes.

[0016] For example, in the gaming apparatus described in the Japanese patent publication No. P2000-350805, an information display panel having some transparency is placed on the rear or close to the rear of the face panel and is configured with a matrix display unit enabling display by a dotted pattern using dots formed by a plurality of lines and columns. Moreover, the information display panel is configured by a transparent electronic luminescent (EL) panel in order to display characters and symbols, etc. on the panel by a dotted pattern.

[0017] However, in the gaming apparatus comprising the information display panel (i.e., Japanese patent publication No. P2000-350805), although display of various information including images for entertainment can be accomplished, the symbols of the respective reels are viewed through the dotted pattern because the information display panel is transparent.

[0018] Accordingly, it is a problem that both the images for entertainment and the symbols of the respective reels may not be displayed clearly.